DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020933 Address: 333 Burma Road **Date Inspected:** 25-Nov-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. WU SHI GAO **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: OBG** Segment

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the PL30 stiffener to edge plate weld joint located on Panel Point (PP108) of 11EW at counter weight side. The weld is designated as CSD-PP108-150. The welder is identified as 045175. ZPMC QC Mr. WU SHI GAO was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-1G (1F)-FCM-Repair-1. The weld repair report number is named as WR-17692.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Fillet welds joining the I-Rib to side plate hold back weld joint located on CB-16 at north side. The weld is designated as SP203-016-044. The welder is identified as 040609. ZPMC QC Mr. ZHU YUAN YUAN was onsite monitoring the welding variables. The

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inprocess FCAW appears to be progressing in compliance with WPS-B-T-2132-ESAB.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the PL30 to floor beam plate weld joint located on Panel Point (PP108) of 11EW at counter weight side. The weld is designated as CSD-PP108-152. The welder is identified as 045175. ZPMC QC Mr. WU SHI GAO was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-1G (1F)-FCM-Repair-1. The weld repair report number is named as WR-17693.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Fillet welds joining the I-Rib to floor beam plate hold back weld joint located on CB-16 at north side. The weld is designated as FB203-016-010. The welder is identified as 041713. ZPMC QC Mr. ZHU YUAN YUAN was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-P-2114-FCM-1.

2. NDT:

Ultrasonic Testing (UT) (A, B, C and D-Scan):

UT carried out as per the ABF submitted UT Notification No 11242010-1 Item No 2.

This QA Inspector performed Ultrasonic testing (UT) 10 % of the area that has been previously tested and accepted by ABF Quality control personnel. This QA inspector generated a UT (TL-6027) report on this date. The members are identified as butt joint between edge plate to edge plate transverse splice weld joint located on 11CE+11DE at bike path side. According to rejection criteria of "D" Scan procedure that Caltrans QA did not find any Rejected indication at scanning area. The Weld Designation is as follows: OBE11A-005.

UT carried out as per the ABF submitted UT Notification No 11242010-1 Item No 3.

This QA Inspector performed Ultrasonic testing (UT) 10 % of the area that has been previously tested and accepted by ABF Quality control personnel. This QA inspector generated a UT (TL-6027) report on this date. The members are identified as butt joint between bottom plate to bottom plate transverse splice weld joint located on 11CE+11DE. According to rejection criteria of "D" Scan procedure that Caltrans QA did not find any Rejected indication at scanning area. The Weld Designation is as follows: OBE11C-003.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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Inspected By: Pillai,Santosh Quality Assurance Inspector **Reviewed By:** Miller,Mark QA Reviewer